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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/044,222	11/21/2001	Robert M. Davis	2760-047	7918

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EXAMINER

MILLER, JONATHAN R

ART UNIT PAPER NUMBER

3653

DATE MAILED: 01/25/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/044,222

Applicant(s)

DAVIS, ROBERT M.

Examiner

Jonathan R. Miller

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 October 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-10 is/are allowed.
- 6) ☒ Claim(s) 11-30 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 11 – 30 are rejected under 35 U.S.C. 102(b) as being anticipated by Kobayashi.

With regards to claim 11, the reference discloses a single continuous disc screen having first (40b) and second (40a) sections positioned end-to-end and including a plurality of laterally extending shafts, a plurality of discs mounted on the shafts and means for rotating the shafts in a common direction so that the discs will classify mixed recyclable materials deposited onto the discs and convey a portion of the materials along a conveying direction, and means for adjusting an angle of inclination (19) of the second section relative to the first section (Fig. 9).

3. With regards to claim 12, the reference further discloses a first frame (40b) for rotatably supporting a first portion of the shafts included in the first section and a second frame (40a) for rotatably supporting a second portion of the shafts included in the second section, and means for mounting the second frame for pivotal rotation relative to the first frame (Fig. 9).

4. With regards to claim 13, the reference further discloses the mounting means includes a shaft (21A) of the first section (Fig. 9)

5. With regards to claim 14, the reference further discloses the means for adjusting the angle of inclination includes a hydraulic cylinder (19).

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1. With regards to claim 15, the reference further discloses a stand that supports the first and second frames (Fig. 9).
 2. With regards to claim 16, the reference further discloses the first and second sections have a generally planar configuration (col. 7, lines 1+).
 3. With regards to claim 17, the reference further discloses the second section has more shafts than the first section (Fig. 9).
 4. With regards to claim 18, the reference further discloses the second section can be pivoted so that the first and second sections form a single planar disc screen (col. 7, lines 1+).
 5. With regards to claim 19, the reference further discloses the shafts of the first section are rotated by a first drive means and the shafts of the second section are rotated by a separate second drive means (col. 12, lines 5+, 55+).
 6. With regards to claim 20, the reference further discloses a method of classifying mixed recyclable materials containing paper and containers (col. 1, lines 5+), comprising the steps of: providing a single continuous inclined disc screen having a plurality of discs with irregular outer contours supported on parallel shafts spaced along a conveying direction; rotating the shafts in a common direction; depositing the mixed recyclable materials onto the rotating discs; and adjusting an angle of inclination of a downstream section (40a) of the disc screen relative to an upstream section (40b) of the disc screen to ensure that mostly containers fall off an input end of the disc screen and mostly paper falls off an output end of the disc screen (col. 8, lines 18+).
- Examiner contends that section "40a" can be designated as the downstream section because materials are traveling both directions.

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7. With regards to claim 21, the reference further discloses a disc screen including a plurality of interleaved discs supported on parallel shafts spaced along a conveying direction, a first frame (40b) rotatably supporting a first portion of the shafts to define a first section of the disc screen, a second frame (40a) rotatably supporting a second portion of the shafts to define a second section of the disc screen, and means (21A) for pivotally mounting the second frame to the first frame; at least one drive and drive linkage that rotates the shafts (30); the discs having an outer contour shaped for agitating materials deposited onto the disc screen (Fig. 1) and for carrying at least a portion of the materials along the conveying direction when the discs are rotated in a common predetermined direction by the drive and drive linkage; and means (19) for selectively adjusting an angle of inclination of the second section of the disc screen relative to the first section of the disc screen in order to improve the separation of materials deposited onto the disc screen (Fig. 9, col. 8, lines 18+).

8. With regards to claim 22, the reference further discloses the first frame and the second frame are carried by a stand (Fig. 9).

9. With regards to claim 23, the reference further discloses the frames have complementary mating surfaces that limits a range of articulation of the second frame relative to the first frame (Fig. 9).

10. With regards to claim 24, the reference further discloses the first section is fixed and the second section articulates relative to the first section via the selective adjusting means (Fig. 9).

11. With regards to claim 25, the reference further discloses the shafts of the first section are rotated by a first drive mean and a first drive linkage and the shafts of the second section are rotated by a second drive mean and a second drive linkage (col. 12, lines 5+, 55+).

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12. With regards to claim 26, the reference further discloses the first section extends at a predetermined fixed inclination and the second section is pivotal relative to the first section via the selective adjusting means (Fig. 9).

13. With regards to claim 27, the reference further discloses the discs of the first section have a first spacing that is different from a second spacing of the discs of the second section (col. 7, lines 39+).

14. With regards to claim 28, the reference further discloses the first and second sections are positioned end-to-end to form a single continuous classifying deck (col. 7, lines 1+).

15. With regards to claim 29, the reference further discloses the discs of the first and second sections are rotated by a common motor and drive linkage (col. 8, lines 1+).

16. With regards to claim 30, the reference further discloses the means for pivotally mounting the second frame to the first frame includes a shaft of the first section (21A).

Allowable Subject Matter

17. Claims 1 – 10 are allowed.

18. The following is an examiner's statement of reasons for allowance: the prior art fails to disclose or render obvious an output end of the first disc screen section; a second frame positioned adjacent to the first frame; a second disc screen section having an input end immediately adjacent to the output end of the first disc screen section and means for selectively adjusting a second angle of inclination of the second disc screen section relative to the first disc screen section without changing a first angle of inclination of the first disc screen section, in combination with the other elements of claim 1.

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Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jonathan R. Miller whose telephone number is (703) 305-5778. The examiner can normally be reached on M-F: 8:30AM-5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Donald P. Walsh can be reached on (703) 306-4173. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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